

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/287,654	04/07/1999	PATRICK W. DOWD	DOWD-3-3	6548
27973	7590 09/22/2003			
OFFICE OF THE ASSOC. GEN. COUNSEL (IP & T)			EXAMINER	
9800 SAVAGE ROAD SUITE 6542 FORT MEADE, MD 20755-6542		REVAK, CHRISTOPHER A		
			ART UNIT	PAPER NUMBER
			2131	
			DATE MAILED: 09/22/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.uspto.gov



# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 12

Application Number: 09/287,654

Filing Date: April 07, 1999 Appellant(s): DOWD ET AL.

> Robert D. Morelli Reg. No. #37,398 For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed on July 1, 2003.

## (1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

## (2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

### (3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

#### (4) Status of Amendments After Final

No amendment after final has been filed.

## (5) Summary of Invention

The summary of invention contained in the brief is correct.

#### (6) Issues

The appellant's statement of the issues in the brief is correct.

Art Unit: 2131

## (7) Grouping of Claims

The rejection of claims 1-26 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

## (8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

#### (9) Prior Art of Record

5,826,014

Coley et al

10-1998

Decasper et al, "Crossbow: A Toolkit for Integrated Services of Cell Switched IPv6#" ,1997, pg 1-10

# (10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1,4-8,14, and 17-21 are rejected under 35 U.S.C. 103(a). This rejection is set forth in prior Office Action, Paper No. 9.

# (11) Response to Argument

The Appellant has noted that U.S. Patent 5,835,726 is relied upon for "a user generates a rule base which is then converted into a set of filter language instructions"; "each rule in the rule base includes"; and "packets are filtered as they flow into and out

Page 3

of the network in accordance with the rules comprising the rule base" as recited in the abstract. The Appellant has argued that the examiner's reasoning relying upon dictionary terms for rules and filters is incorrect and that they are distinct entities and does not mean that a filter is a rule base. The examiner respectfully disagrees, dictionary terminology was applied as evidence of well known terms in the art. The examiner is relying upon use of dictionary terminology for use of well defined terms. The examiner notes that the Appellant's remark on official notice taken by the examiner, the appellant has not officially challenged the examiner for use of official notice, nor has the Appellant seasonably challenged it. Please see MPEP 2144.03.

As per the applicant's reference to U.S. Patent 5,835,726, the examiner notes that it is presumed that prior U.S. Patents are considered valid and that the inventors can be their own lexicographer and the examiner is hereby not going to comment on the validity of the reference to U.S. Patent 5,835,726 and finds the citation irrelevant since it was not used as a rejection.

The Appellant argues that Decasper et al fails to recite of storing information in an Association Identification Unit pertaining to flow and filter information. It is further argued that Decasper et al discloses of storing packets in a stack (page 5, line 2) and that the AIU stores filters, not rules. The examiner has provided support for the explanation of filters and rules whereby it is disclosed in the Microsoft Computer Dictionary that filter is defined as "a pattern or mask through which data is passed to weed out specified items" as recited on page 197. Rules is defined in Merriam Webster's Collegiate Dictionary as "to exist in a specified state or condition" as recited

on page 1024. The examiner has found equivalence between the definitions of the two whereby the filtering disclosed in the combination of Decasper et al and Coley et al is a specific form of rules. The examiner is interpreting the AIU or database as storage means that is well known terminology in the art. The examiner has provided rationale that states initializing the AIU (database) is necessary for relationships and data types to be defined beforehand so that queries and manipulation of the data can be accomplished more efficiency which is accepted practices in the prior art concerning databases.

The Appellant argues that Decasper et al does not includes rules for acceptance or rejection and making a determination whether or not a packet should be allowed or denied access as the Appellants. The examiner notes that Decasper et al does disclose of rules for acceptance of packets, but fails to disclose of rules for rejection whereby Coley et al is relied upon for this feature. The Appellant is individually attacking the reference instead of the combination that which was applied. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Decasper et al recites of an association identification unit or AIU (database) stores information pertaining to a flow of data (connectionless) data packets and additionally stored filter information (rules). A received IPv6 (connectionless) packet is associated with an identifier (flow tag). If the (connectionless) packet includes an unknown flow, a new flow

Page 6

Application/Control Number: 09/287,654

Art Unit: 2131

entry is automatically created (computed) for it which is added to and stored in the AIU (database comprising an approved list) and it is allowed to pass (pg 4 & 5). Decasper et al only recites of accepting packets. Coley et al discloses of monitoring incoming IP (connectionless) packets and to determine the validity of the source address (col. 8, lines 1-3 and col. 11, lines 47-48). If the analyzed source address is compared against authorized (approved list) and unauthorized (disapproved list) addresses maintained by a proxy agent (which is stored in a database) and the comparison includes checking if the source is unknown, if it is not on the list, then it is denied (col. 11, lines 22-32). The motivation of Coley et al is that problems in the prior art exist when a packet comprises an unknown address and because it is not identified, it is allowed to pass (col. 3, lines 11-14) and this presents a problem because it provides the hacker a means to bypass the packet filter (col. 3, lines 21-22). Coley et al utilizes the source address information whereby the flow tag information of Decasper et al discloses that the source address is included within the flow (pg 4). The examiner has provided references that demonstrate of well known aspects concerning packet acceptance and rejection practices that is a further verification of industry standards that are implemented for protecting a network from receiving unacceptable packets and accepting packets determined to be acceptable to a recipient.

The Appellant has argued that the flow identifier of Decasper et al is only used to associate packets in a flow so that they get processed by the same filter, not to allow or deny access to further processing and that they do not perform a match for the purpose of determining whether or not to grant access to a packet. Decasper et al discloses of

Art Unit: 2131

an association identification unit or AIU (database) that stores information pertaining to a flow of data (connectionless) data packets and additionally stored filter information (rules). A received IPv6 (connectionless) packet is associated with an identifier (flow tag). If the (connectionless) packet includes an unknown flow, a new flow entry is automatically created (computed) for it which is added to and stored in the AIU (database comprising an approved list) and it is allowed to pass (pg 4 & 5). The examiner again directs that Appellant to the comments recited above concerning Decasper et al not disclosing the feature of denying access to a packet whereby the combination of Decasper et al and Coley et al recite of this feature. The Appellant has disclosed of a flow being a series of packets, each identified by the same source address and the same destination address as recited on page 2, lines 7-8. Decasper et al discloses of flow being a sequence of data packets where all packets have header fields (including source address and destination address) that is equivalent to the applicant's interpretation of the claim language. Coley et al discloses of monitoring incoming IP (connectionless) packets and to determine the validity of the source address (col. 8, lines 1-3 and col. 11, lines 47-48). If the analyzed source address is compared against authorized (approved list) and unauthorized (disapproved list) addresses maintained by a proxy agent (which is stored in a database) and the comparison includes checking if the source is unknown, if it is not on the list, then it is denied (col. 11, lines 22-32). The motivation of Coley et al is that problems in the prior art exist when a packet comprises an unknown address and because it is not identified, it is allowed to pass (col. 3, lines 11-14) and this presents a problem because it provides

the hacker a means to bypass the packet filter (col. 3, lines 21-22). Coley et al utilizes the source address information whereby the flow tag information of Decasper et al discloses that the source address is included within the flow (pg 4). The examiner has provided references that demonstrate of well known aspects concerning packet acceptance and rejection practices that is a further verification of industry standards that are implemented for protecting a network from receiving unacceptable packets and accepting packets determined to be acceptable to a recipient.

The Appellant additionally argues of the examiner's inherency statement concerning Decasper et al initializing the AIU or database and that the AIU is a pack of filters with the ability to place an identifier on subsequent packets in a flow. The examiner is interpreting the AIU or database as storage means that is well known terminology in the art. The examiner has provided rationale that states initializing the AIU (database) is necessary for relationships and data types to be defined beforehand so that queries and manipulation of the data can be accomplished more efficiency which is accepted practices in the prior art concerning databases.

The appellant has argued that Decasper et al makes no suggestion of Decasper et al denying access to a packet. The examiner notes that Decasper et al does disclose of rules for acceptance of packets, but fails to disclose of rules for rejection whereby Coley et al is relied upon for this feature. The Appellant is individually attacking the reference instead of the combination that which was applied. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of

references. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Decasper et al recites of an association identification unit or AIU (database) stores information pertaining to a flow of data (connectionless) data packets and additionally stored filter information (rules). A received IPv6 (connectionless) packet is associated with an identifier (flow tag). If the (connectionless) packet includes an unknown flow, a new flow entry is automatically created (computed) for it which is added to and stored in the AIU (database comprising an approved list) and it is allowed to pass (pg 4 & 5). Decasper et al only recites of accepting packets. Coley et al discloses of monitoring incoming IP (connectionless) packets and to determine the validity of the source address (col. 8, lines 1-3 and col. 11, lines 47-48). If the analyzed source address is compared against authorized (approved list) and unauthorized (disapproved list) addresses maintained by a proxy agent (which is stored in a database) and the comparison includes checking if the source is unknown, if it is not on the list, then it is denied (col. 11, lines 22-32). The motivation of Coley et al. is that problems in the prior art exist when a packet comprises an unknown address and because it is not identified, it is allowed to pass (col. 3, lines 11-14) and this presents a problem because it provides the hacker a means to bypass the packet filter (col. 3, lines 21-22). Coley et al utilizes the source address information whereby the flow tag information of Decasper et al discloses that the source address is included within the flow (pg 4). The examiner has provided references that demonstrate of well known aspects concerning packet acceptance and rejection practices that is a further verification of industry standards that are implemented for protecting a network from

Art Unit: 2131

receiving unacceptable packets and accepting packets determined to be acceptable to a recipient.

It is argued by the Appellant that Coley et al discloses of a disapprove list, but that Coley et al requires a series of tests for determining accessibility (Fig. 4A and Fig. 4B) and further comments that executing a series of tests for each packet is inefficient. The Appellant has provided an improvement that initializes a database with approved and disapproved flow tags that are used to determine accessibility and additionally compute a flow tag, not a flow identifier, for any flow that is not pre-approved or predisapproved. The examiner respectfully disagrees for it is disclosed by Decasper et al. that an "lpv6 packet is associated with a flow by tagging with an identifier for the flow it belongs to. If the packet in question belongs to yet an unknown glow, an new flow entry is automatically created (page 5, top portion of the page). Based upon the Appellant's specification, it is recited of a specific form of flow tag computation from page 13, line 18 through page 15, line 3. On page 15, lines 14-15 the Appellant recites "So, the present invention is not limited to the specific flow tag construction described above." The examiner has given the interpretation of a flow tag its broadest possible interpretation as being any identifying information associated with a packet that comprises and source and destination address whereby the disclosure of Decasper et al meets the Appellant's claim limitations. Coley et al is relied upon as a combination with Decasper et al for accepting and rejection packets based upon flow tag or identifying information which includes source and destination address information, please refer above for further explanation concerning the combination of Decasper et al and Coley et al.

Page 10

Art Unit: 2131

The Appellant has directed the examiner to page 11, line 14 through page 12,

line 2 whereby it is disclosed that the Appellant's method only does a computation when

it is presented with a new flow and not for every packet presented to it. The examiner

notes that it is not currently claimed by the Appellant of being presented with a new flow

and not performing a computation for every packet presented to it.

The Appellants arguments pertaining to claims 6-8 and 19-21 pertain to the

examiner's position concerning official notice. As per the Appellant's remark on official

notice taken by the examiner, the appellant has not officially challenged the examiner

for use of official notice, nor has the Appellant seasonably challenged it. Please see

MPEP 2144.03.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Page 11

CR

September 16, 2003

Conferees

Norman Wright, Primer

v Examiner

Matthow Smithors

Primary Examiner

OFFICE OF THE ASSOC. GEN. COUNSEL (IP & T)

9800 SAVAGE ROAD SUITE 6542

FORT MEADE, MD 20755-6542